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# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

APR 2 1 1992

Federal Communications Commission Office of the Secretary

In the Matter of	)		j
	)		/
Local Exchange Carrier	)	CC Docket No. 92-24 /	/
Line Information Database	j		

# DIRECT CASE OF THE GTE TELEPHONE OPERATING COMPANIES

GTE Service Corporation, on behalf of its affiliated GTE telephone operating companies

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### SUMMARY

The GTE telephone operating companies ("the GTOCs") submit their Direct Case in the investigation of their Common Channel System 7 ("CCS7") and Line Information Database ("LIDB") tariffs. The GTOCs submit additional information in response to questions posed by the Commission with regard to the proposed CCS7 Access and LIDB Query service, including carrier liability, CCS7 and LIDB network performance, LIDB updates, network priority and rates.

The GTOCs have shown that their tariff is sufficiently detailed to adequately describe the services proposed. The GTOCs' tariff clearly states how the database will be updated and the liability of the carrier for erroneous information. The GTOCs' liability for erroneous information in the data base is limited to the charge for the service -- i.e. the query charge. Limitations upon a carrier's liability have long been recognized as valid and reasonable, in the absence of willful misconduct or gross negligence. Thus, the GTOCs' limitation of liability not to exceed the charge for the LIDB query reasonably balances the service provided and the rate charged and is entirely consistent with the carrier's liability for other services provided under the tariff.

CCS7 Access and LIDB Query standards are necessarily technical and complex. It is routine to make reference in the tariff to the technical publications, rather than burdening the tariff with excessive, highly technical material. The GTOCs have stated clearly which technical materials are referenced and where the materials are available. Since the carrier is obliged to keep its tariff current, including updating technical references, the GTOCs believe that this material is sufficiently clear and reasonable.

The GTOCs' tariff adequately describes their ability to handle multiple queries and call gapping procedures to be implemented during times of system

overload. Since all customers, including the GTOCs, access the LIDB through the RSTP in the same manner, the level of service provided is identical for all customers. Query gapping is a necessary, automatic control procedure which may take effect during periods of LIDB validation system congestion and is applied uniformly to all users. The GTOCs believe that these call gapping procedures are clear, non-discriminatory, reasonable and necessary to assure orderly network integrity and operation.

Redundancy and protections are built into the CCS7 network because the GTOCs are concerned about system reliability. Thus, the potential for service outages have been properly anticipated and minimized. The GTOCs have included network and LIDB validation system performance standards in their tariff and the additional references to performance standards in referenced technical publications. The GTOCs believe that this clearly and reasonably defines the GTOCs' commitment to quality service.

The GTOCs' CCS7 Access uses the same 56 kbps or DS1 interface as is already fully detailed in the tariff and referenced technical publications. The GTOCs specifically referred to the already-existing services to avoid discrimination problems between these services. Since the tariff already contains an appropriate level of detail for these services, there is no need for additional detail for CCS7 Access.

Finally, the GTOCs provide additional justification for the rates for CCS7 Access and LIDB Query service. The GTOCs also incorporate cost support materials previously submitted. These materials show that the GTOCs' rates are reasonable and justified.

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

In the Matter of	)
Local Exchange Carrier Line Information Database	) ) CC Docket No. 92-24 )

# DIRECT CASE OF THE GTE TELEPHONE OPERATING COMPANIES

GTE Service Corporation, on behalf of its affiliated GTE telephone operating companies ("the GTOCs"), hereby submit their Direct Case in the above-captioned tariff investigation in accordance with the Order Designating Issues for Investigation ("Designation Order"), DA 92-347, released, March 20, 1992.

#### INTRODUCTION

On October 4, 1991, the Common Carrier Bureau granted Southwestern Bell Telephone Company ("Southwestern Bell") a waiver to allow tariffing of Common Channel Signaling System 7 ("CCS7") and Line Information Data Base ("LIDB") access services.\(^1\) The Bureau stated that it would grant a similar waiver to any other Local Exchange Carrier ("LEC") to establish rates in support of CCS7 and LIDB access services. Pursuant to the guidelines outlined in the Southwestern Bell Order, the GTOCs also sought waivers of Part 69 rules to

Southwestern Bell Telephone Company, 6 FCC Rcd 6095 (1991).

establish new transport rate elements for CCS7 Access service and LIDB Query service.<sup>2</sup>

On November 14, 1991, the GTOCs filed Transmittal Nos. 691 and 692 introducing Common Channel Signaling System 7 Access service and Line Information Data Base Query service respectively. These tariffs were filed subject to GTE's Petition for Waiver. Only one Interexchange Carrier ("IC"), MCI Communications Corporation ("MCI"), opposed the material filed in Transmittal Nos. 691 and 692.<sup>3</sup> These revisions to GTOC Tariff FCC No. 1, deferred under Transmittal No. 698, and further defined and clarified by the material filed in Transmittal No. 700, dated December 30, 1991, became effective January 1, 1992, under an accounting order and pending further investigation.<sup>4</sup>

Many issues designated for investigation in this proceeding were addressed by the GTOCs in Transmittal No. 700. In addition to further defining and clarifying the CCS7 Access and LIDB Query service offerings, Transmittal No. 700 introduced the following provisions outlining the GTOCs' obligations with respect to LIDB Query service: LIDB Validation System Updates; CCS7 Network Performance; LIDB Validation System (performance); and LIDB Query Gapping. It should be noted that only the GTOCs and Southwestern Bell included these specific provisions in their respective LIDB Query tariffs.

<sup>2</sup> GTE Telephone Operating Companies, Petition for Waiver of Part 69 Rules, filed Oct. 21, 1991.

See MCI's Petition to Reject or, in the Alternative, Suspend and Investigate, filed November 27, 1991 ("MCI Petition"). The GTOCs replied to this Petition. See Reply of the GTE Telephone Operating Companies, filed Dec. 9, 1991 ("GTE Reply").

Local Exchange Carrier Line Information Dababase, 7 FCC Rcd 525 (1991).

The following are specific answers to the issues raised in the Designation Order:

I. Have the LECs adequately described the LIDB query service in the tariffs?

Petitioners allege that the tariffs lack sufficient detail for potential customers to be certain of what service they are receiving. Parties have argued that the LECs should provide the following information in their tariffs: the frequency, nature, and priority of database updates, and the LEC liability for erroneous information in the database; to the extent that carriers reference technical publications, the dates of the latest revisions to any referenced technical publications should be reflected in the tariff; liability for fraudulent use of calling cards; "call gapping" procedures; and technical parameters for processing database queries. To aid in the investigation of this issue, we invite interested parties to address whether the tariffs should contain such information.

#### **RESPONSE:**

A. The frequency, nature, and priority of database updates and the LEC liability for erroneous information in the database.

This issue questions the accuracy of the data in the database and the LEC's responsibility for erroneous data. As long as the Commission maintains that LIDB Query service is a common carrier service, it is entirely consistent to treat the carrier's liability for that service the same as its liability for other common carrier services. To do otherwise would also require that the carrier be compensated for additional risk. As shown below, LIDB service is treated in the same manner as other services provided under the GTOCs' access tariff.

The GTOCs' tariff clearly states how the database will be updated and the liability of the carrier for erroneous information. In Transmittal No. 700, the GTOCs clarified their obligation with respect to database updates. Specifically:

# 8.8(C)(1) LIDB Validation System Updates

As a part of the normal business operation of LIDB Query service, the Telephone Company will, on a business day basis, add, delete, and modify end user customer accounts as such customers move, become delinquent on their accounts, or order new service. Emergency or priority updates will be made reflecting lost, stolen, or otherwise compromised calling cards on at least a daily basis. The Telephone Company will conduct annual audits of the LIDB where line information for all working exchange access lines and calling cards is audited. The Telephone Company will monitor calling card validation and take timely steps to generate high usage reports to detect and stop fraudulent calling card use.<sup>5</sup>

This language clearly and unambiguously states how the GTOCs will update, maintain and ensure the integrity of their database. Further administrative details would be unnecessary and burdensome.

The GTOCs' liability for erroneous information in the data base is limited to the charge for the service -- <u>i.e.</u> the query charge. The GTOCs' liability for LIDB information is consistent with the limitation of liability for all services provided by the GTOCs through their access tariff. Therefore, the general liability section, which has been in the access tariff since its inception, applies:

The telephone company's liability, if any, for willful misconduct is not limited by this tariff. With respect to any other claim or suit by the customer for damages associated with the ... provision ... of FIA, and subject to the provisions of (B) through (D) following, the telephone company's liability, if any, shall not exceed an amount equal to the proportionate charge for the FIA for the period during which the provision of FIA was affected.<sup>6</sup>

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<sup>5</sup> GTOC Tariff FCC No. 1, Section 8.8(C)(1)

<sup>6</sup> Id. at Section 2.1.3.

The GTOCs' limitation of liability not to exceed the charge for the LIDB query is reasonable. Limitations upon a carrier's liability have long been recognized as valid and reasonable, in the absence of willful misconduct or gross negligence.<sup>7</sup> In order for a utility to charge a reasonable price, there must be a reasonable limitation of liability. In Western Union Telegraph Company v. Esteve Brothers & Company, the Supreme Court recognized the legitimacy of limiting carriers' liability and upheld the validity of a limitation of liability for mistakes in transmission stating, "[t]he limitation of liability was an inherent part of the rate."8

Although the measures taken by the GTOCs will minimize the chances of error, errors may occur. The GTOCs, however, cannot insure any customer accessing the data base against any direct or consequential damages, nor is it reasonable to expect the GTOCs to assume all risks. The Court in Robert Gibb & Sons recognized this: "Telegraph companies are entitled to be compensated in accordance to the risk assumed in the performance of its services." The Court recognized that a regulated public utility has significantly curtailed its rights and privileges and should be similarly regulated and limited as to its liabilities. Citing earlier precedents, the Court concluded that "[t]here is nothing

See. e.g., Primrose v. Western Union Telegraph Co., 154 U.S. 1 (1894);
 Pilot Industries v. Southern Bell Telephone and Telegraph Co., 495 F.
 Supp. 356, 31 (D.S.C 1979); Robert Gibb & Sons. Inc. v. Western Union Telegraph Co., 428 F. Supp. 140 (D.N.D. 1977).

<sup>&</sup>lt;sup>8</sup> 256 U.S. 566, 571 (1921).

While insurance may be available to insure against unauthorized use of consumer credit cards, such insurance is costly, approximately 102% of the actual loss. This insures against only direct damages. Currently, insurance is not available for calling card toll fraud.

<sup>&</sup>lt;sup>10</sup> 428 F. Supp. at 144.

harsh or inequitable in upholding such a limitation of liability when it is thus considered that the rates as fixed by the Commission are established with a rule of limitation in mind. Reasonable rates are in part dependent upon such a rule.'"11

MCI's assertion that "the only incentive LECs have to insure their data are as reliable as possible is if they, too, face financial risk ..." mistakenly assumes that somehow the GTOCs would not suffer financial risks for incorrect data. The GTOCs could incur substantial loss from erroneous data and fraudulent use of their network. Because the GTOCs use the database to support their own services as well, they have a substantial incentive to maintain an accurate and timely database.

In summary, the liability proposed by the GTOCs correctly balances the service provided and the rate charged and is entirely consistent with the carrier's liability for other services provided under the tariff.

B. To the extent that carriers reference technical publications, the dates of the latest revisions to any referenced technical publication should be reflected in the tariff.

Certain interconnection standards are necessary to achieve network diversity, reliability and redundancy. The technical requirements to interconnect to the GTOCs' network for LIDB validation purposes are in accordance with TR-TSV-000905, which represents the industry interconnection standard. This technical standard is incorporated by reference in the GTOCs' tariff. The

ld., quoting, Trammel v. Western Union Telegraph Co., App., 129 Cal. Rptr. 361, 369 (1976), quoting Cole v. Pacific Telephone and Telegraph Co., App., 246 P.2d 686, 688 (1952).

MCI Petition at 6.

GTOCs have included the issue number and date of the technical reference.

Changes to TR-TSV-000905 will be reflected in future tariff updates.

Since the inception of the access tariff in 1984, the Commission has permitted the GTOCs' to reference certain technical publications in their access tariff, rather than burdening the tariff with excessive technical material. The tariff lists all the technical publications referenced, cross-references them to the tariff section and states where they are available.<sup>13</sup> It has also been GTE's practice to include the date of the most recent revision of any technical publication when originally filed and to revise that date as revisions are made to the referenced technical publication, once there is assurance that the technical changes can be implemented. Most recently, the Commission granted the GTOCs Special Permission,<sup>14</sup> to incorporate Bellcore Technical Reference Publication TR-TSV-000905, Issue 1, August, 1989 in connection with CCS7 service.

In summary, the GTOCs have stated clearly which technical materials are referenced and where the materials are available. Since the carrier is obliged to keep its tariff current, including updating technical references, the GTOCs believe that this material is sufficiently clear and reasonable.

# C. Liability for fraudulent use of calling cards.

A carrier cannot be liable for the fraudulent use of calling cards. All that the LIDB query provides is information as to whether a particular calling card is valid at that time. To impose liability upon the GTOCs for the fraudulent acts of third parties would be unreasonable. As GTE previously stated, "a LIDB cannot

Reference To Technical Publications, GTOC Tariff FCC No. 1, Page 14.

Special Permission No. 91-917,

eliminate fraudulent calling card use, but serves as an important mechanism to assist in controlling fraud ... GTE's LIDB monitors the use of each calling card and line number for use patterns that typically characterize fraud. GTE can analyze the data, perform an investigation and 'shut down' the card, if necessary."15

These protections were instituted to assist in the prevention of fraudulent calling card use, not as an absolute bar to fraud. As stated in Robert Gibb & Sons v. Western Union Telegraph Company, supra, there is nothing harsh or unreasonable to limit a telephone company's risk, which is commensurate with the charge. To require the GTOCs to insure against the fraudulent acts of third parties would require the GTOCs to provide insurance for a service for which an insurance policy cannot be procured at this time. Moreover, the rate charged does not reflect this greater risk. Finally, recognizing that combating fraud is an industry problem, carrier customers are encouraged to establish their own usage parameters and fraud protections, prior to LIDB validation.

In summary, carriers should not be liable for fraudulent use. In no event should the carrier's liability exceed the per query charge.

# D. Call Gapping Procedures.

Several commenters have raised concerns regarding database capacity, the carrier's ability to handle all queries received at a particular time and potential discrimination during times of system overload. The GTOCs addressed these concerns in Transmittal No. 700. The GTOCs' tariff outlines the GTOCs' obligation with respect to LIDB Query Gapping:

# 8.8.(C)(4) LIDB Query Gapping

During periods of LIDB validation system congestion, the Telephone Company will utilize an automatic query gapping procedure to control such congestion. Automatic query gapping controls congestion via a gap and duration index which tells the switch the gap (how long the switch should wait before sending another query to the LIDB) and the duration (how long the switch should continue to perform gapping). For example, if gapping is invoked, every third query might be dropped. This query gapping procedure will be applied uniformly to all users of the Telephone Company's LIDB. The Telephone Company reserves the right to invoke manual intervention in the automatic query gapping procedure to preserve the integrity of the network.<sup>16</sup>

All customers, including the GTOCs, access GTE's LIDB through the RSTP in the same manner. The level of service provided is identical for all customers. Query gapping, if necessary, may take effect during periods of LIDB validation system congestion.<sup>17</sup> Query gapping is a query limiting control procedure invoked automatically by the LIDB system and applied to all users of the database. Any service limitation would affect all customers in the same manner and to the same degree.

The controls of gap and duration as explained in the tariff, would be implemented by the LIDB system automatically and uniformly. When gapping is in progress, the LIDB owner is not aware of who is being curtailed, only that gapping is in progress at a certain level affecting all LIDB customers accessing the LIDB at that time. With the global effect of gapping, there is no manual

GTOC Tariff FCC No. 1, Section 8.8(C)(4).

As currently configured, GTE's system can handle 75 queries per second. See Section 8.8(C)(3). During normal operations, GTE currently anticipates approximately 30 queries per second. Thus, call gapping controls are not likely to be implemented except under extraordinary circumstances.

intervention available to relieve a particular LIDB access originator, or to initiate further gapping specific to a LIDB access originator.

Customers are expected to adhere to accepted industry automatic query gapping procedures or other overload control procedures in order to assure orderly network operation.<sup>18</sup> If a given LIDB validation customer does not adhere to accepted industry practices, the GTOCs reserve the right to intervene to preserve network integrity and to prevent catastrophic service interruptions. If this type of intervention becomes necessary, the GTOCs would notify the LIDB customer to be restricted prior to taking any action.

In summary, query gapping is a necessary, automatic control procedure applied uniformly to all users of the database during times of system congestion. The GTOCs believe that these call gapping procedures are clear, non-discriminatory, reasonable and necessary to assure orderly network integrity and operation.

# E. Additional technical parameters for processing database queries.

Arguments were presented earlier in this proceeding that carriers should provide additional technical parameters for processing database queries. In response to these concerns, the GTOCs added two provisions in Transmittal No. 700 outlining the GTOCs' obligation with respect to CCS7 Network Performance and LIDB Validation System performance:

The technical references for overload and call gapping procedures are found at Bellcore TR-TSY-000271, Section 22.3.13, Revision 3, March 1988.

# 8.8.(C)(2) CCS7 Network Performance

The Telephone Company supports the performance standards contained in Section 7 of TR-TSV-00905. The overall end-to-end CCS7 network objective is less than ten minutes unavailability per year from any Signal Point (SP) to any other SP. The performance objective for any single SP, including a Service Control Point (SCP), is less than three minutes unavailability per year. The combined link set from the SCP to the RSTP has a performance objective of less than two minutes unavailability per year.<sup>19</sup>

# 8.8.(C)(3) LIDB Validation System

LIDB validation system downtime is required to be less than twelve hours per year. The LIDB validation system is capable of processing up to 75 queries per second. The response time for a query, from transmission to reception, is less than one second and should not exceed two seconds for 99 percent of all queries.<sup>20</sup>

The GTOCs fully understand the importance of avoiding service outages completely and strive to reach that goal. Because of the requirement for three-way diverse quad links, as specified in the tariff for CCS7 Access and in the Bellcore Technical Reference Publication TR-TSV000905, CCS7 Access service outages where all routes to GTE's LIDB are all out of service at the same time, are most unlikely. With the redundancy and protection built into the CCS7 network, potential for service outages have been properly anticipated and minimized.

In summary, the GTOCs believe that by including network and LIDB validation system performance standards in the tariff and the additional

<sup>19</sup> GTOC Tariff FCC No. 1, §8.8(C)(2).

<sup>20 &</sup>lt;u>Id</u>. at Section 8.8(C)(3).

references to performance standards in TR-TSV000905 clearly and reasonably defines the GTOCs' commitment to quality service.

II. Should the tariffs contain additional detail regarding the technical parameters for the Common Channel Signal (CCS) interconnection link?

In order to access LIDB, customers must purchase a CCS interconnection link. The tariff descriptions of the CCS interconnection service contain cross references to technical publications and state that the CCS interconnection link is technologically equivalent to a 56 Kbps special access line. In their special access tariffs, carriers specify a number of technical parameters for a 56 Kbps line. Parties should address whether tariffs for CCS interconnection links should include a similar level of detail regarding technical parameters.

#### RESPONSE:

The GTOCs' tariff specifies that CCS7 Access uses the same 56 kbps or DS1 interface as is already fully detailed in the tariff and referenced technical publications. This interconnection is not "technologically equivalent" as suggested by the above question, but the same as 56 kbps or DS1 services found in Section 5, Special Access, of the GTOCs' tariff. In that these services are already adequately described in the tariff, there is no need for additional detail for CCS7 Access. The GTOCs specifically referred to the already-existing services to avoid discrimination problems between these services.

Section 4.2.10(A)(1), Common Channel Signaling System 7 (CCS7)

Access Service - Dedicated Switched Access, specifies that customers may interconnect to GTE's CCS7 network using a 56 Kbps interface or a DS1 interface. A limited description of the technical parameters for 56 Kbps Digital Data service and for DS1 High Capacity Digital service appears in Section 5.2

(Description of Special Access) and Section 5.3.<sup>21</sup> Section 4.2.10(A)(1) contains the same description of technical parameters for interconnection to GTE's CCS7 network utilizing a 56 Kbps or DS1 interface. Additional technical description is provided by reference to Bellcore Technical Reference Publication TR-TSV-000905, Issue 1, August 1989, as shown in the GTOCs' tariff. Additional technical parameters are included by reference to GTE Technical Interface Reference Manual, Issue 2, - issued August, 1984, revised December 1985, August 1986 and October 1988; Sections 3300, 5107, 6000, 6103, and 7000. These latter technical descriptions have appeared in the GTOCs' tariff since the Special Access tariff became effective in 1985.

In summary, given the level of technical description for 56 Kbps Digital Data Service and DS1 High Capacity Digital service already contained in the tariff, or contained in the tariff by reference, GTE believes the tariff contains a reasonable and appropriate level of technical detail.

III. Are the rate levels established in the tariffs excessive?

To assist in our resolution of this rate level issue, we direct the carriers specified below to provide the following information:

(1) Bell Communications Research, Inc., has developed a cost model called "Common Channel Signalling Cost Information System" (CCSCIS). Any carrier who relied on CCSCIS to develop its rates must explain why use of such a model is appropriate for common channel signalling services.

See, e.g., GTOC Tariff FCC No. 1, Sections 5.2.7, 5.2.8, 5.3.6, 5.3.7.

#### RESPONSE:

The GTOCs did not use the CCSCIS model in the development of their cost study for LIDB Service.

(2) Those carriers who did not use CCSCIS to allocate investment should fully explain how they identified the plant used to provide LIDB service.

#### **RESPONSE:**

Investment costs for the Regional Signal Transfer Point ("RSTP") port termination and the query functions were identified using the accounting books of the company or based upon contracted or anticipated future costs from the hardware and software vendors. The GTOCs used an unsubsidized, five-year, long-run approach in estimating unit costs so as to avoid the "lumpy investment" costing fluctuations caused by single year costing. The long-run approach has been supported by most industry economists as the practical extension of economic theory into the costing of telecommunications services.<sup>22</sup> Specifically, the GTOCs defined costs over the 1992-1996 horizon.

An engineering process costing model methodology to make allocations of SS7 costs to LIDB Query Transport or LIDB Query service was not used.

Allocations of investment to LIDB service were made on the basis of direct

See, e.g., Alfred E. Kahn, <u>The Economics of Regulation: Principles and Institutions</u>, vol. I, p. 85, John Wiley and Sons, 1970; Keith M. Howe and Eugene F. Rasmussen, <u>Public Utility Economics and Finance</u>, p. 191, Prentice Hall, 1982; Richard D. Emmerson, <u>Theoretical Foundation of Network Costs</u>, pp. 16-19; Charles F. Phillips, Jr., <u>The Regulation of Public Utilities</u>, pp. 391-92, Public Utilities Reports, Inc., 1984.

assignment or forecasted relative use of common equipment. With respect to RSTP port terminations, it was calculated that 7.9% of the California RSTP ports and 28.3% of the Illinois/Indiana ports would be used in the provision of LIDB service to the IXCs. The balance of the ports would be used to support LEC to GTE LIDB connections, Query Response Service ("QRS"), internal support of trunk signaling for toll and local, internal Alternatively Billed Services ("ABS"), inter-office CLASS and ISDN and Database 800. All LIDB specific software was directly assignable to LIDB service. All Service Control Point ("SCP") hardware and software costs at the Illinois/Indiana locations were assigned to LIDB since that is the only planned database application resident there at this time. The port termination portion of the RSTP equipment described above represented 37% of the total RSTP cost. The remaining RSTP cost is common equipment used for switching functionality, which was prorated to LIDB based upon LIDB forecasted traffic relative to all other forecasted traffic crossing the RSTP (i.e., LEC to GTE LIDB, including QRS, trunk signaling for local and toll, inter-office CLASS and ISDN and Database 800).

(3) All filing carriers should provide total investment underlying each of the four rate elements and identify the accounts established by Part 32 of the Commission's Rules, 47 C.F.R. Part 32, in which these investments are recorded.

#### RESPONSE:

# **DSAT and DSAL CHARGE INVESTMENT:**

The total investment for the CCS7 Access Dedicated Switched Access

Transport ("DSAT") and Dedicated Switched Access Line ("DSAL") was

provided to the Commission on a per circuit basis as shown in Transmittal No.

691, filed November 14, 1991.<sup>23</sup> Exhibits 2 through 5, pages 1, 2, and 3 of 21 are included and shown by reference herein as Attachment 1, Page 1 through 12. Lines 1 through 11 on each page show the breakdown of material, installation, and engineering costs between Outside Plant - Account 24xx and Circuit Equipment - Account 2232.11.

# **RSTP PORT CHARGE INVESTMENT:**

California \$328,302.67 hardware cost for 22 ports.

Illinois \$527,904.22 hardware cost for 32 ports.

Indiana \$521,031.46 hardware cost for 32 ports.

California \$ 99,270.20 software cost for 22 ports.

Illinois \$143,201.14 software/upgrade cost for 32 ports.

Indiana \$143,201.14 software/upgrade cost for 32 ports.

RSTP port hardware costs were expressed on a per port basis as shown in Transmittal No. 691. Exhibit 6, Pages 1, 2, and 3 of 22 are included and shown by reference herein as Attachment 2, Pages 1, 2, and 3. Line 6 on each page shows the total installed cost for California, Illinois and Indiana respectively.

Software and software upgrade costs for the RSTP ports were expensed in the cost study and comprise the "Other" cost category, Line 18, as also shown in Transmittal No. 691. Exhibit 6, Pages 1, 2, and 3 of 22 are included and shown by reference herein as Attachment 2, Pages 1, 2, and 3.

The cost support material submitted with Transmittal No. 691 is hereby incorporated by reference herein.

Building modification costs for Illinois and Indiana totaling \$1,559.24, were included in Line 1, as also provided in Transmittal No. 691. Exhibit 6, Pages 2 and 3 of 22 are included and shown by reference herein as Attachment 2, Pages 2 and 3 of 3. The balance in Line 1 is central office equipment.<sup>24</sup>

### **LIDB QUERY TRANSPORT INVESTMENT:**

GTE System \$1,028,095.92 hardware cost. GTE System \$478,421.92 software cost.

LIDB query transport hardware costs are as shown in Transmittal No. 692, filed November 14, 1992.<sup>25</sup> Exhibit 2, Page 1 of 6 is included and shown by reference herein as Attachment 3. Line 6 on this page shows the total installed costs for California, Illinois and Indiana.

Software costs for five years were expensed in the cost study. The average annual software cost is \$95,684.38 and was included on Line 16 in the "Administration" cost category as also shown in Attachment 3. Also included on Line 16 as "Administration" expense are five years of link expense averaging \$56,003.48 per year. The balance of the "Administration" cost category is comprised of operational overheads averaging \$33,282.24 annually.<sup>26</sup>

Hardware costs were assigned to Digital Electronic Switching Account 2212.10; application software costs were assigned to Account M212.01; and building modification costs were assigned to Buildings Account 2121.20.

The cost support material submitted with Transmittal No. 692 is hereby incorporated by reference herein.

Hardware costs were assigned to Digital Electronic Switching Account 2212.10; application software costs were assigned to Account M212.01; and link expense was assigned to Common General Administrative Services Account 6728.10.

# **LIDB QUERY INVESTMENT:**

GTE System \$4,665,246.31 hardware cost GTE System \$9,367,580.35 software cost

LIDB query hardware costs are shown in Transmittal No. 692. Exhibit 3, Page 1 of 6 is included and shown by reference herein as Attachment 4. Line 6 on this page shows the total installed cost for California, Illinois and Indiana.

Software costs for five years were expensed in the cost study. The average annual software cost is \$1,873,516.07 and was included on Line 18 in the "Other" cost category as shown in Attachment 4.

Building modification costs for Illinois and Indiana totaling \$248,314.90, were included in Line 1, as shown in Attachment 4. The balance in Line 1 is DBAC investment and central office equipment.<sup>27</sup>

The LIDB query investment also included an annual average DBAC expense of \$1,104,913.24 as also shown in Attachment 4. This DBAC expense was included in the "Administration" cost category, Line 16. The balance of the "Administration" cost on Line 16, \$252,186.68 is for operational overheads.<sup>28</sup>

Hardware costs were assigned to Digital Electronic Switching Account 2212.10; application software costs were assigned to Account M212.01; and building modification costs were assigned to Buildings Account 2121.20.

All DBAC and DBAS expenses were assigned to Regulated Other General Purpose Computer Expense, Account 6124.97. DBAC investment of \$336,906.04 was included as part of Line 1, Exhibit 3, Page 1, of Transmittal No. 692 (Attachment 4 herein) and was assigned to Telephone Plant in Service Other General Purpose Computer Expense, Account 6124.97.

(4) All filing carriers should identify and fully document all factors applied to the investment identified in response to the requests for information above to develop the rates, cross-referencing to Automated Reporting Management Information System (ARMIS) data where possible.

#### RESPONSE:

GTE has reviewed the ARMIS system and ARMIS reports to determine if a cross-referencing of costs from ARMIS could be made to the costs used in the LIDB service study. GTE has concluded that such a cross-reference is not meaningful because the ARMIS Reports 43-01 and 43-04 provide information on such an aggregated basis that a direct comparison is not possible. Report 43-01 expresses cost on an operating company basis and not on a service basis. Report 43-04 develops cost by major account and category, but cannot discern between SS7 and non-SS7 investment.

For SS7 costs assigned to Account 2212, COE Digital Switching, the required level of detail is lost as the SS7 and non-SS7 costs combined prior to the allocation to rate elements using the existing separations guidelines established by this Commission. Further, the costs for LIDB service are only a subset of the total SS7 costs, as this technology also supports the upgrade of existing services and the development of new services.

The factors used in the GTOCs' cost studies were based upon actual tax return and depreciation rates and a ratio of historical expenses to the average plant balance for each identified plant account. The development of these factors conform to GAAP accounting principles and use the FCC's established system of accounts. Tax rates used reflect the taxable rates established by the federal and state tax codes.

The development of annual DSAL, DSAT and RSTP port costs are as described in Transmittal No. 691. Section IV of that transmittal, the financial analysis section of the Description and Justification, is included and shown by reference herein as Attachment 5. The development of LIDB Query Transport and LIDB Query costs are as described in Transmittal No. 692. Section IV of that transmittal, the financial analysis section of the Description and Justification, is included and shown by reference herein as Attachment 6.

(5) Bell Atlantic, BellSouth, NYNEX, and Pacific Bell were providing CCS interconnection service under tariff before the filing of the transmittals under investigation in this docket. Those carriers should demonstrate how their CCS interconnection service rates meet the requirements for restructured services in Part 61.49(f) of the Commission's Rules.

#### RESPONSE:

Not applicable to the GTOCs.

# **CONCLUSION**

The GTOCs have shown in this Direct Case and the material submitted with Transmittal Nos. 691, 692 and 700 that their proposed CCS7 Access and LIDB Query service offerings are reasonable and lawful. Accordingly, the

Commission should conclude this investigation and allow the GTOCs' tariffs to remain in effect as filed.

Respectfully submitted,

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THEIR ATTORNEY